

# Transient Non-Community Source Water Assessment Program (SWAP) Report

For  
NORWICH LAKE FARM UPPER SYSTEM



Prepared by the  
Massachusetts Department of  
Environmental Protection,  
Bureau of Resource  
Protection, Drinking Water  
Program

Date Prepared:  
April 20, 2004

## What is SWAP?

The Source Water Assessment Program (SWAP), established under the federal Safe Drinking Water Act, requires every state to:

- inventory land uses within the recharge areas of all public water supply sources;
- assess the susceptibility of drinking water sources to contamination from these land uses; and
- publicize the results to provide support for improved protection of sources.

The Massachusetts Department of Environmental Protection (DEP) Drinking Water Program is undertaking this task. The rankings of susceptibility of your well(s) to potential contamination are listed in Table 1.

**Table 1: Public Water Supply Information**

|                      |                                |
|----------------------|--------------------------------|
| <i>PWS Name</i>      | Norwich Lake Farm Upper System |
| <i>PWS Address</i>   | 87 Searle Rd                   |
| <i>City/Town</i>     | Huntington, Massachusetts      |
| <i>PWS ID Number</i> | 1143014                        |

**Table 2: Well Information**

| <i>Well Name</i> | <i>Well (Source) ID#</i> | <i>Zone I Radius (feet)</i> | <i>IWPA Radius (feet)</i> | <i>Microbial Susceptibility*</i> | <i>Non-Microbial Susceptibility**</i> |
|------------------|--------------------------|-----------------------------|---------------------------|----------------------------------|---------------------------------------|
| Well #2          | 1143014-01G              | 178                         | 473                       | High                             | High                                  |

\* Common sources of microbial contamination include septic systems, wildlife and livestock operations. These types of activities in the source protection area increase your well's Microbial Susceptibility.

\*\* Sources of non-microbial contamination include inorganic and organic chemicals. Inorganic contaminants include metals and naturally occurring minerals. Organic contaminants include fuels, degreasing solvents, herbicides and pesticides.

## What is the Purpose of This Report?

This report identifies the most significant *potential contaminant sources* that could threaten your well's water quality. Your susceptibility ranking does not imply poor water quality. Actual water quality is best reflected by the results of your regular water tests.

## What is my Well's Source Protection Area?

A well's source protection area is the land around your well where protection activities should be focused. Your public drinking water supply well has a Zone I protective radius and an Interim Wellhead Protection Area (IWPA). The Zone I is the area that should be owned or controlled by the water supplier and limited to water supply activities. The IWPA is the larger area that is likely to contribute water to the well. Refer to **Figure 1** on page 2 for an example of a Zone I and IWPA.

An IWPA is the land located within a fixed radius of the well. The IWPA radius is based upon the average pumping rate of the well. In many instances the IWPA does not include the entire land area that could contribute water to the well. Therefore, the well may be susceptible to contamination from activities outside of the IWPA that are not identified in this report.

### What is Susceptibility?

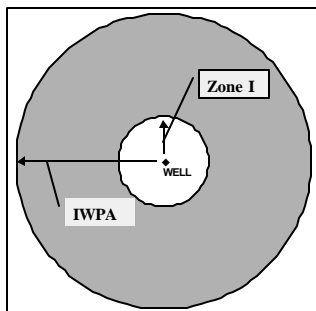
Susceptibility is a measure of your well's potential to become contaminated by land uses and activities within the Zone I and Interim Wellhead Protection Area (IWPA). Please see the enclosed map for your well's Zone I and IWPA areas.

The possibility of a release from potential contaminant sources is greatly reduced if best management practices (BMPs) are used. The susceptibility determination for your well did not take into account whether BMPs are being used.

Susceptibility of a drinking water well does *not* mean a customer will drink contaminated water. Water suppliers protect drinking water by monitoring water quality, treating water supplies, and using BMPs and source protection measures to ensure that safe water is delivered to the tap.

**Figure 1: ZONE I/ IWPA  
EXAMPLE Source  
Protection Area for Well #2  
(1143014-01G)**

Zone I = 268 ft.  
IWPA = 693 ft.



### How Was my Well's Susceptibility Determined?

Your well's **high** susceptibility to potential microbial threats is based on the septic system components within the Zone I / IWPA. The **high** susceptibility to potential non-microbial threats is based on the agricultural activities within the Zone I and/or the IWPA. Other moderate threats include local roads within the Zone I and/or the IWPA.

This source water assessment report is based on information provided by you on your 1999 Transient Non-Community Public Water System Sanitary Survey self-audit questionnaire, water quality data and/or from other sources of information. DEP has not verified the accuracy of the information submitted with the survey.

### Recommendations for your Well

All public water systems with groundwater sources should ensure that only activities necessary for the operation and maintenance of the drinking water system occur within the well's Zone I.

#### Specific Recommendations:

- ✓ inspect the Zone I and IWPA regularly;
- ✓ work with the Board of Health and other local officials to make sure your well(s) are included in local regulations and inspection efforts;
- ✓ restrict access to the well and post the area with *Drinking Water Protection Area* signs;
- ✓ make certain that a proper sanitary seal is in place for the well (grouted casing and concrete pad);
- ✓ remove oil/hazardous materials storage tanks, and hazardous materials use or storage from the Zone I;
- ✓ do not use pesticides, fertilizers or road salt within the Zone I;
- ✓ address septic system issues in Zone I; remove septic system, relocate well or pursue upgrading options;
- ✓ water systems not meeting DEP Zone I requirements must get DEP approval and address Zone I issues prior to increasing water use or modifying system.

#### Need More Information?

Additional information or sources of information can be obtained by calling Catherine Skiba at (413) 755-2119 or visiting DEP's Drinking Water Web site at <http://www.state.ma.us/dep/brp/dws>.

#### Glossary

- Best Management Practices (BMPs) are operational procedures used to prevent or reduce pollution.
- Public Water System is a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year.